

af a controlling device capable of sensing and responding to external conditions and capable of controlling sensor components operation, said controlling device being a pressure or proximity detector which communicates with the electronic circuit to enable sensor components operation when the performing component is fastened to the tissue to the extent that the detector receives only rays which are transmitted through or reflected from the tissue.

REMARKS

Applicant has carefully studied the outstanding Office Action. The present response is intended to be fully responsive to all points of rejection raised by the Examiner.

Claims 1-32 are pending in the application. Claims 1, 4, 9, 13, 21 and 22 have been amended. Claims 20 and 29-32 have been cancelled. New claims 33-35 have been added. Reconsideration of the application is respectfully requested.

Allowed Claims

Applicants would also like to gratefully acknowledge the Examiner's indication that claims 11, 24 and 25 would be allowable if the objection as being dependent upon a rejected base claim were overcome. Rather than incorporate the limitations of the allowable dependent claims into the independent claims, new independent claims 33, 34 and 35 have been added.

Claim Objections

Claims 9, 21 and 22 have been amended to overcome informalities and are now believed to be allowable.

Claim Rejections

35 U.S.C. §112 Rejections

Claims 29-32 stand rejected as being indefinite. Claims 29-32 have been cancelled and thus the rejection is now moot.

35 U.S.C. §101 Rejections

The Office Action also rejects claim 4 under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Applicants respectfully traverses this rejection in view of the remarks that follow.

According to the Office Action, the claim improperly includes a body portion (tissue) as part of the claimed apparatus. Claim 4 has been amended to clarify that the tissue is clearly not part of the claimed invention. Claim 4 (as amended) recites that, *inter alia*, “the adhering component.... adheres the performing component to the tissue”. Applicant respectfully submits that claim 4 is directed to statutory subject matter in accordance with 35 U.S.C. §101.

Double Patenting

Claim 20 has been cancelled and thus the double patenting objection is now moot.

35 U.S.C. §102 Rejections

Claims 1-6, 10, 13-18, 20-23 and 26-32 stand rejected under 35 U.S.C. §102(b) as being anticipated by Goodman et al (US Patent no: 4,630,014).

Claims 1, 4, 13, 14, 22, 23 and 27-32 stand rejected under 35 U.S.C. §102(b) as being anticipated by Muz (US Patent no: 5,054,488).

Claims 1-4, 7, 10, 12-16, 19 and 27-32 stand rejected under 35 U.S.C. §102(b) as being anticipated by Ogawa et al (US Patent no: 5,427,093).

Claims 1-9, 13-21 and 26-32 stand rejected under 35 U.S.C. §102(e) as being anticipated by Rafert et al (US Patent no: 5,817,008).

Applicants respectfully traverse this rejection in view of the remarks that follow.

Claim 1 has been amended and specifically recites:

“A sensor, for radiance based diagnostics, comprising a performing component having at least one radiance source for radiating a tissue and at least one detector for detecting rays emitted from the radiance source; and an adhering component which, *inter alia*, fastens the performing component to the tissue to the

extent that the detector only receives rays which are transmitted through or reflected from the tissue”.

Claim 13, is a system for radiance based diagnostics having a sensor and an electronic circuit in communication with the sensor components. The sensor comprises the recited elements of claim 1.

Claim 27 is a method claim of claim 1 and claim 28 is a method claim of claim13.

According to the .Office Action, Goodman et al ('014) uses “an adhesive layer to minimize noise in the detected signal”, and Muz ('488) uses “an adhesive gel for maintaining contact with the subject during measurements”. Also, according to the Office Action, Ogawa et al ('093) “teaches an oximeter probe with emitters and detectors which protrude through adhesive tape for making good contact with the subject’s skin”.

According to the Office Action, Rafert et al ('008) teaches “a conformal oximeter sensor that includes an emitter and a detector encased with cover portions (partitions) and an adhesive layer for securing the device to a subject” .

As is well-established, in order to successfully assert a *prima facie* case of anticipation, the Examiner must provide a single prior art document that includes every element and limitation of the claim or claims being rejected. Therefore, if even one element or limitation is missing from the cited document, the Examiner has not succeeded in making a prima facie case.

Thus, Applicants respectfully submit that the prior art cited by the Examiner, that is, Goodman et al ('014), Muz ('488), Ogawa et al ('093) and Rafert et al ('008) meet either expressly or inherently the limitation that “the adhering component fastens the performing component to the tissue so that the detector only receives rays which are transmitted through or reflected from the tissue”.

Thus, the cited prior art does not anticipate either of Applicants' claims 1, 13, 27 and 28. In addition, since claims 2-12 depend from independent claim 1 and claims 14-19 and 21-26 depend from independent claim 13, they cannot be anticipated for the same reason.

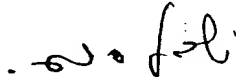
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PATENT

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

In view of the above amendments and remarks, it is respectfully submitted that the claims are patentable over the art of record and are now in condition for allowance. Prompt notice of allowance is respectfully solicited.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE IN THE CLAIMS

1. (Once Amended). A sensor, for radiance based diagnostics [diagnosticsis], comprising:

a performing component[; and an adhering component

said performing component] comprising:

at least one radiance source for radiating a tissue: and

at least one detector for detecting rays emitted from said radiance

source[.]; and

an [said] adhering component [being] capable of fastening the performing component to a tissue such that the radiance source and detector are facing and contiguous with the tissue[.];

wherein, when operative, the adhering component fastens the performing component to the tissue to the extent that the detector only receives [only] rays which are transmitted through or reflected from the tissue.

4. (Once Amended). A sensor according to claim 1 wherein the adhering component is formed as part of the performing component and adheres [contacts both] the performing component [and] to the tissue.

9 (Once Amended). A sensor according to claim 8 wherein the partition further surrounds either the radiance source or the detector or both.

13. (Once Amended). A system for radiance based diagnostics comprising:

a sensor; and

an electronic circuit [that is] in communication with the sensor components and [is] capable of controlling the sensor components operation;

wherein the sensor comprises;

a performing component comprising at least one radiance source for radiating a tissue and at least one detector for detecting rays emitted from said radiance source[,]; and

an adhering component being capable of fastening the performing component to a tissue such that the radiance source and detector are facing and contiguous with the tissue,

wherein, the adhering component fastens the performing component to the tissue to the extent that the detector only receives [only] rays which are transmitted through or reflected from the tissue.

21 (Once Amended). A system according to claim [20] 17 wherein the partition further surrounds either the radiance source or the detector or both.

22 (Once Amended). A system according to claim 13 wherein the sensor further comprises a controlling device capable of sensing and responding to external conditions and which controlling device is capable of being in communication with the sensor components, the electronic circuit or both.

New Claims

-- 33 (Newly added). A sensor, for radiance based diagnostics, comprising

a performing component comprising at least one radiance source for radiating a tissue and at least one detector for detecting rays emitted from said radiance source;

an adhering component being capable of fastening the performing component to a tissue such that the radiance source and detector are facing and contiguous with the tissue; and

a controlling device, said controlling device being a pressure or proximity detector configured to enable sensor operation when the performing component is fastened to the tissue to the extent that the detector receives only rays which are transmitted through or reflected from the tissue. --

-- 34. (Newly added) A system for radiance based diagnostics comprising:

a sensor; and

an electronic circuit in communication with the sensor components and capable of controlling the sensor components operation;

wherein the sensor comprises:

a performing component comprising at least one radiance source for radiating a tissue and at least one detector for detecting rays emitted from said radiance source;

an adhering component being capable of fastening the performing component to a tissue such that the radiance source and detector are facing and contiguous with the tissue; and

a controlling device, said controlling device being a pressure or proximity detector configured to enable sensor operation when the performing component is fastened to the tissue to the extent that the detector receives only rays which are transmitted through or reflected from the tissue. --

- 35. (Newly added) A system for radiance based diagnostics comprising:
- a sensor; and
 - an electronic circuit in communication with the sensor components and capable of controlling the sensor components operation;
- wherein the sensor comprises:
- a performing component comprising at least one radiance source for radiating a tissue and at least one detector for detecting rays emitted from said radiance source;
 - an adhering component being capable of fastening the performing component to a tissue such that the radiance source and detector are facing and contiguous with the tissue; and
 - a controlling device capable of sensing and responding to external conditions and capable of controlling sensor components operation, said controlling device being a pressure or proximity detector which communicates with the electronic circuit to enable sensor components operation when the performing component is fastened to the tissue to the extent that the detector receives only rays which are transmitted through or reflected from the tissue. --

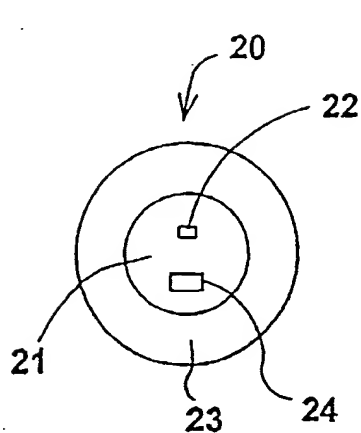
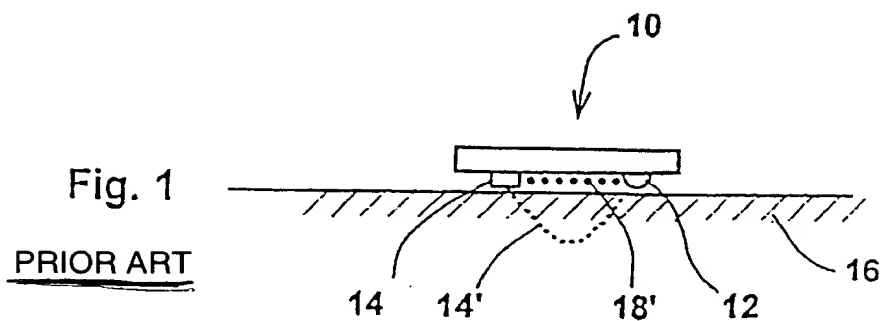


Fig. 2A

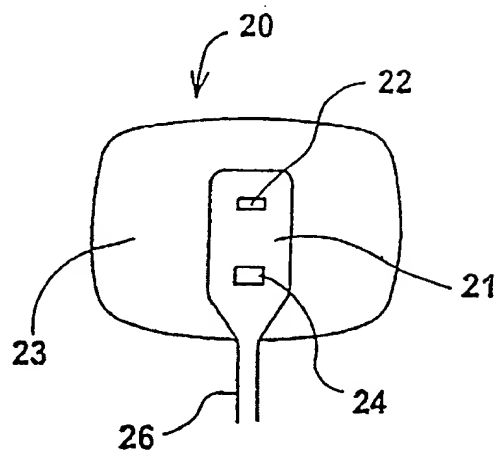


Fig. 2B

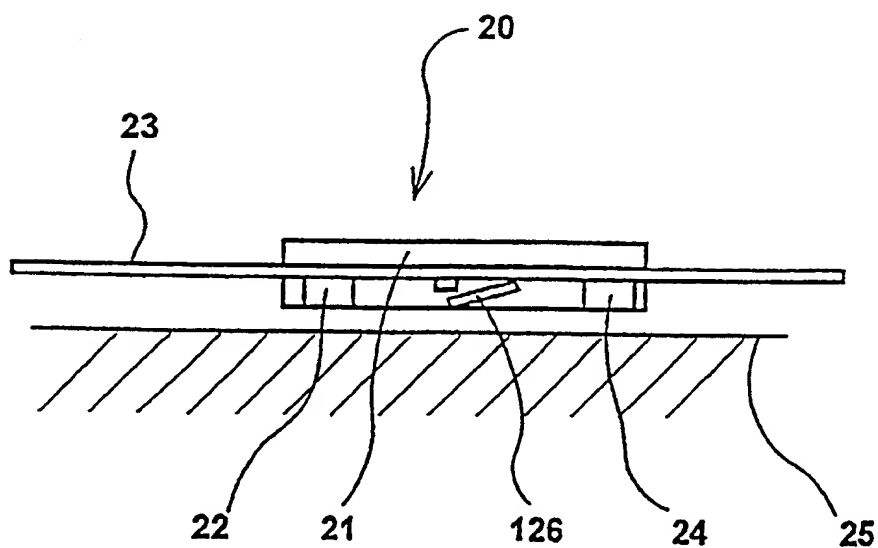


Fig. 2C